

VPDES PERMIT APPLICATION ADDENDUM – SUPPLEMENTARY INFORMATION

A. General Information

1. Entity to whom the permit is to be issued: **Halifax County Service Authority**
Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.
2. Classify the discharge as one of the following by checking the appropriate line:
 X a. Existing discharge
 b. Proposed discharge
 c. Proposed expansion of an existing discharge

B. Location

1. Is this facility located within city or town boundaries? **(Y)** / N
2. (New Issuances & Modifications Only) What is the tax map parcel number for the land where this facility is located? **PRN: 3724 PIN: 019-05-85-0001**
3. For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities? 0
4. What is the total acreage of the property on which the treatment plant is located? ~1 Acres
5. Give the minimum elevation of the treatment plant site. ~350 feet
6. Flood elevations of the treatment plant site:
25 year flood ~335 feet
100 year flood ~340 feet
7. Attach to the back of this application a location map(s) which may be traced from or is/are a production of a U.S. Geological Survey topographic quadrangle(s) or other appropriately scaled contour map(s). The location map(s) shall show the following: **See attached map**
 - a. Treatment Plant
 - b. Discharge point
 - c. Receiving waters
 - d. Boundaries of the property on which the treatment plant is located, or to be located.
 - e. Distance from the treatment plant to the nearest: (Indicate "not applicable" for any distance greater than 2000 feet)
 - ii. Residence **~200 feet**
 - iii. Distribution line for potable water supply **On site**
 - iv. Reservoir, well, or other source of water supply **Dan River-3,000 feet**
 - v. Recreational area **Not Applicable**
 - f. Distance from the discharge point to the nearest (Indicate "not applicable" for any distance greater than 15 miles)
 - ii. Downstream community **Not Applicable**
 - iii. Upstream and downstream water intake points
Upstream: **Leigh Street Filter Plant Intake 2,000 feet**
Downstream: **Not Applicable**
 - iv. Shellfishing waters **Not Applicable**
 - v. Wetlands area **300 feet**
 - vi. Downstream impoundment **Not Applicable**
 - vii. Downstream recreational area **Staunton River State Park 10 miles**

C. Discharge Description

1. Provide a brief description of the wastewater treatment scheme. Also, attach to the back of this application, a process flow diagram showing each process unit of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system.

Water is brought into the treatment facility from the Dan River and undergoes settling and filtration processes prior to disinfection. Wastewater is generated when the two sedimentation basins are cleaned (quarterly) and the filter backwashed (as needed, usually once or twice a week). Prior to discharge into Poplar Creek, the wastewater is dechlorinated using sodium bisulfate.

See attached schematic drawing.

2. What is the design average flow of this facility? 3 MGD Finished water production capacity; discharge average 0.09 MGD MGD
Industrial facilities: What is the max. 30-day avg. production level (include units)? 1.5 MGD

3. In addition to the above design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? Y / (N)

If "Yes", please specify the other flow tiers (in MGD) or production levels: _____
Please consider: Is your facility's design flow considerably greater than your current flow? Do you plan to expand operations during the next five years?

4. Nature of operations generating wastewater: Drinking water production; wastewater generated during sedimentation basin cleanouts and filter backwashes

0% % of flow from domestic connections/sources

Number of private residences to be served by the wastewater treatment facilities:

X 0 _____ 1-49 _____ 50 or more

100 % of flow from non-domestic connections/sources

5. Mode of discharge: ___Continuous X Intermittent ___Seasonal
Describe frequency and duration of intermittent or seasonal discharges:
Sedimentation basin cleanouts typically occur quarterly; filter backwashes typically occur 1-2 times per week

6. Identify the characteristics of the receiving stream at the point just above the facility's discharge point:

X Permanent stream, never dry

___ Intermittent stream, usually flowing, sometimes dry

___ Ephemeral stream, wet-weather flow, often dry

___ Effluent-dependent stream, usually or always dry

___ Lake or pond at or below the discharge point

___ Other: _____

D. Anticipated Phasing Schedule for Plant Capacity – Proposed / Expanding Discharges **N/A**

If this application is for a proposed or expanded discharge(s), complete the phasing schedule below beginning with the year in which construction completion is anticipated and progressing in increments of 5 years for 30 years thereafter.

Proposed Design Capacity: _____ MGD

Anticipated Date of Construction Completion: _____, _____
Month Year

Years after Completion	Projected Flow (MGD)
0	
5	
10	
15	
20	
25	
30	

E. Interim Facilities

Are the wastewater treatment facilities interim? (designed for a useful life of less than 5 years)

_____ Yes ☒ No

If so, provide the estimated date to be discontinued (month, year) _____, and the name and location of the intended replacement facility.

Name / Location

F. List of Materials Stored at the Facility (i.e. chemicals, petroleum products)

Material	Amount (monthly avg)	Stored Location
Acetylene (compressed gas)	1 welder tank	Shop
Oxygen (compressed gas)	1 tank	Shop
Alum	7,000 gallons	Alum Building
Sodium Hydroxide	8,000 gallons	Adjacent to finish water pumps/Outside
Chlorine (compressed gas)	4,000 pounds	Chlorine Room/Chlorine Feeder Room
Gasoline	5 gallons	Storage Shed
Lime	500 pounds	Chemical Storage Area
Sodium Bisulfite 30-40%	110 pounds	Chemical Storage Area
Sodium Fluorosilicate	1,500 pounds	Chemical Storage Area
Zinc Orthophosphate	440 gallons	Chemical Storage Area
Miscellaneous Laboratory Reagents	Varies	Laboratory
Miscellaneous Cleaning Supplies	Varies	Facility